

Delaware Department of Natural Resources
and Environmental Control

Division of Water

Ronald Graeber
Program Manager I

(302) 739-9948

Ronald.Graeber@state.de.us

**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL
CONTROL**

**DIVISION OF WATER RESOURCES
Watershed Assessment Section**

Statutory Authority

7 **Delaware Code** Chapters 40, 60, 66, 70, and 72

29 **Delaware Code** §§ 8014(5) and 8025

**REGULATIONS GOVERNING THE POLLUTION CONTROL STRATEGY
FOR THE INDIAN RIVER, INDIAN RIVER BAY, REHOBOTH BAY AND
LITTLE ASSAWOMAN BAY WATERSHEDS**



Effective

November 11, 2008

What is a Pollution Control Strategy (PCS)?

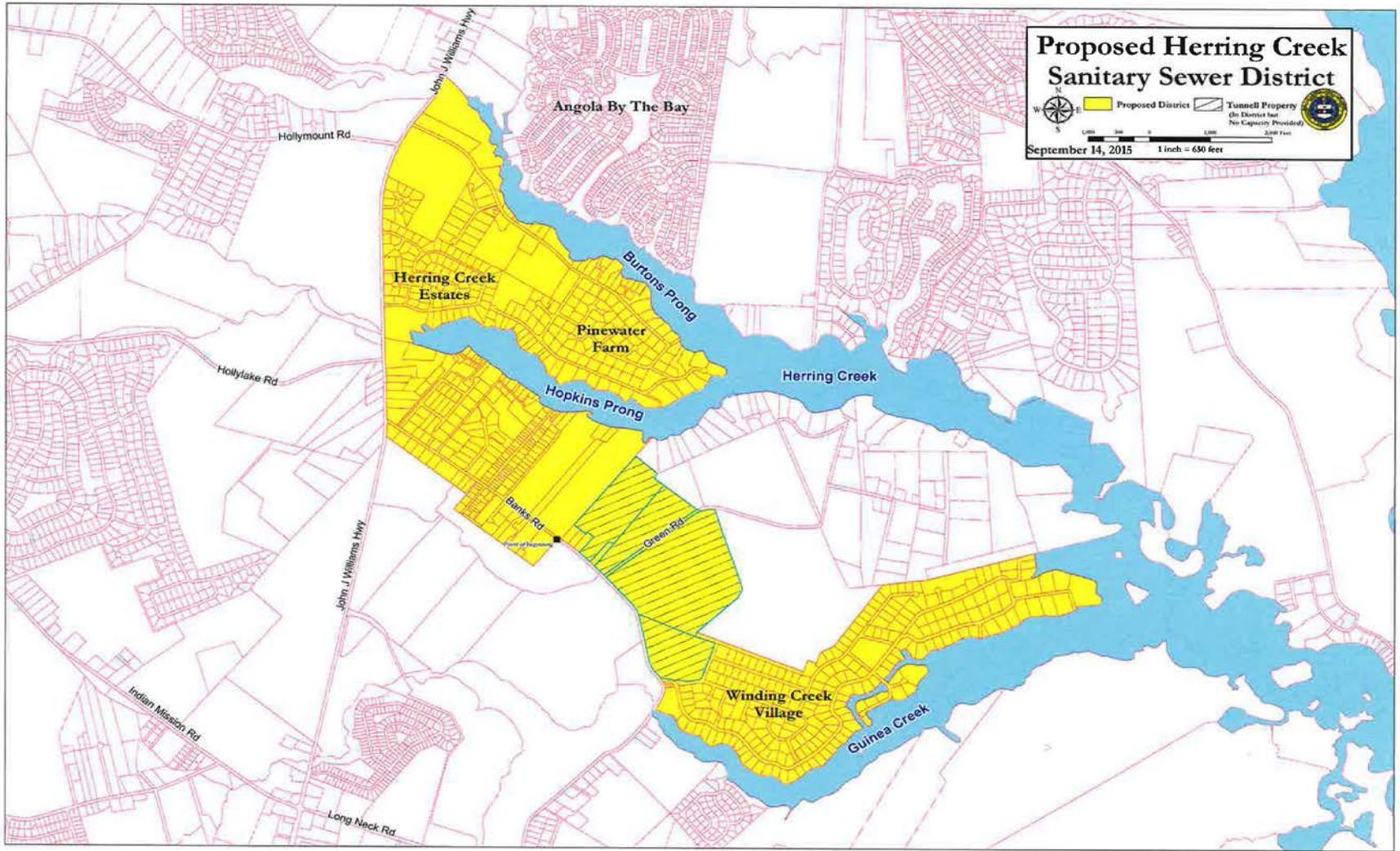
- Set of actions that are designed to reduce nutrient loading to the Inland bays
- Implement the PCS through regulation although the components may be a combination of voluntary and required actions
- The “Tributary Action Team” recommended the PCS to the Department for promulgation

On-Site Wastewater Systems Performance Standards

- PSN1
 - New large on-site wastewater treatment and disposal systems with flows >20,000 gpd
 - Average annual TN 5 mg/l
- PSN2
 - New and existing large on-site wastewater treatment and disposal systems with flows greater than 2,500 and less than 20,000 gpd
 - Average annual TN 10 mg/l
- PSN3
 - All new and existing small on-site wastewater treatment and disposal systems that have flows equal to or less than 2,500 gallons per day flow
 - Average annual TN 20 mg/l or 50% reduction

PSN3 – How do we get there???

- Incorporating advanced treatment units
- Purpose of Innovative/Alternative (I/A) treatment units
 - Reduce strength of septic tank effluent through aerobic or aerobic/anaerobic processes; reduce nutrient concentrations
 - Parameters
 - BOD < 30 mg/l, TSS < 30 mg/l, *** TN by 50%
 - Accomplishes this through use of
 - Pumps, jets, blowers, alarms, filtered media
 - Used in conjunction with septic tank
 - Used in place of septic tank
 - Requires a Maintenance Contract



**Proposed Herring Creek
Sanitary Sewer District**

September 14, 2015 1 inch = 650 feet

Legend:
■ Proposed Districts
▨ Tunnell Property (In District but No Capacity Provided)

Scale: 0 325 650 1000 Feet

North Arrow



Proposed Herring Creek Sewer District

- 713 Existing Homes on septic systems
- Average nitrogen load from a septic system is ~35-40 pounds/year
- The 713 homes discharge ~28,500 pounds of Nitrogen to ground water annually
- Alternative to Septic Systems: Connect to Inland Bays Regional Wastewater Spray Irrigation Facility
 - Complies with the Pollution Control Strategy
 - Reduces nitrogen load by ~75%
 - Keeps over 21,000 pounds of Nitrogen from entering the Inland Bays

Proposed Herring Creek Sewer District (continued)

- Division of Water supports the proposal to create the Herring Creek Sewer District:
 - Complies with the Pollution Control Strategy
 - Eliminates over 700 septic systems
 - Eliminates a significant nutrient load from the Inland Bays